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electrode and the second control electrode are deposited respectively on the P-layer of the first optical waveguide and the second optical waveguide, and in the case of the I-layer buried type, the first control electrode and the second control electrode are deposited respectively on the I-layer of the first optical waveguide and the second optical waveguide, N-layer of the first optical waveguide and the second optical waveguide are deposited, and the first optical waveguide and the second optical waveguide have a common N+ layer to which a DC bias voltage is applied.

15-17. Canceled.

REMARKS/ARGUMENTS

Claims 4-7 and 12-13 stand rejected under the judicially create doctrine of obviousness type double patenting. A terminal disclaimer is enclosed herewith to overcome these rejections.

Claim 1 is rejected under 35 USC 102(b) as being anticipated by Naniwae (USP No. 2002/0159705). Claim 1 is also rejected under 35 USC 102(b) as being anticipated by Li (USPAP No. 2002/0076133). Claims 4-7 and 12 stand rejected under 35 USC 103) as being unpatentable over Li (USPAP No. 2002/0076133) in view of Mak et al. (EP 0445347 A2). Applicants respectfully traverse these rejections for the reasons that follow.

As best understood, Naniwae fails to disclose "an optical amplifying unit configured with a semiconductor, wherein the optical amplifying unit amplifies in high gain light input from the optical transmission path", as recited, in part, in amended claim 1. Claim 1 and its dependent claim's 4-7 and 12-14 are thus allowable over Naniwae.

Li discloses:

"In the present invention, a fiber-to-fiber gain of approximately 3 dB is sufficient for 1xN and NxN non-matrix switches, and a maximum gain of approximately 6 dB is sufficient for NxN matrix switches" (paragraph 13)

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There is no disclosure in Li, however, of "an optical amplifying unit configured with a semiconductor, wherein the optical amplifying unit amplifies in high gain light input from the optical transmission path", as recited, in part in amended claim 1. Claim 1 and its dependent claims 4-7 and 12-14 are thus allowable over Li, whether taken alone or in combination with Mak,

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (650) 326-2400.

Momitted,

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